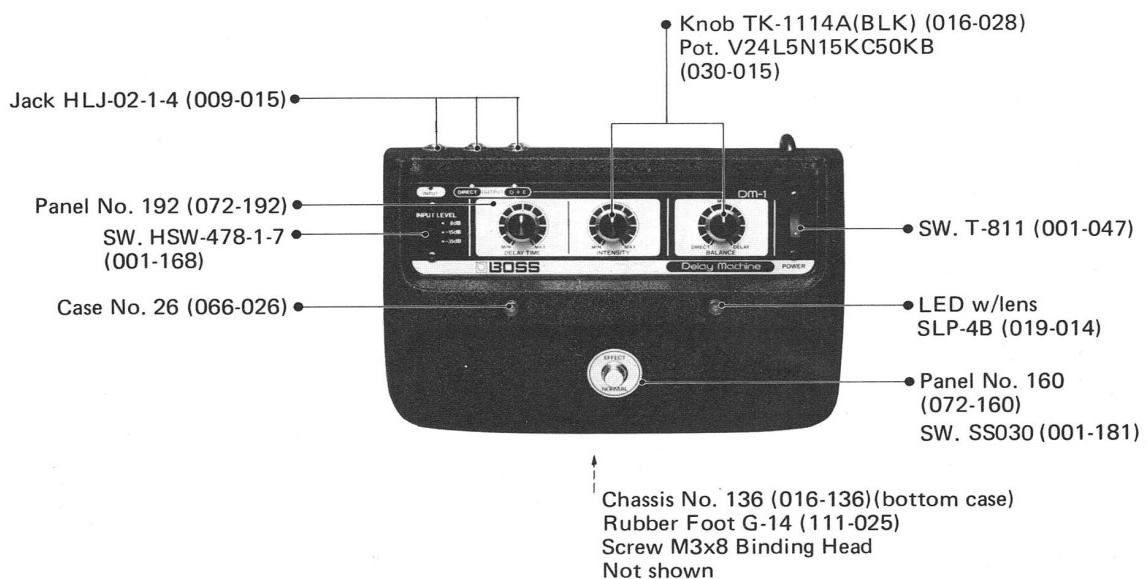


BOSS DM-1 SERVICE NOTES

SPECIFICATIONS

Power consumption	3W	Input impedance	220KΩ
Controls	Delay time (25–500ms continuous), (Balndwisdth: 10K–1KHz) Intensity, Balance	Output load impedance . . .	Over 600Ω
Switches	Power, Input Level Selector, (0/–15/–35dB), Normal/Effect Selector	Gain	UNITY 1
Others	Power Pilot Lamp, Effect/Normal Indicator	S/N ratio	Better than 80dB
		Dimension	260(W)x64(H)x180(D)mm 10.2(W)x2.5(H)x7.1(D)in
		Weight	1.8kg, 3.9lbs.



PARTS LIST

066-026 Case NO.26
061-136 Chassis NO136 (cover)
072-192 Panel NO.192
072-176 Panel NO.160 (E/N)

SWITCHES

001-047 T-811 power
001-181 SS030 push
001-168 HSW-478-1-7 slide
016-028 Knob TK-1114A (BLK)
009-015 Jack HLJ-02-1-4
151-031B PCB Assy ET-31B
052-313B PCB less parts
111-025 Rubber Foot G-14

ICs

020-087 R5101 CCD
020-083 TC-4016P
020-084 TC4069P
020-041 TC-4013P
020-064 μPC-4558C

TRANSISTORS

017-010 2SD234-O
017-022 2SB434-O
017-021 2SC900-F
017-012 2SA733-Q
017-014 2SK30A-Y FET
017-091 2SK30A-O FET

DIODES

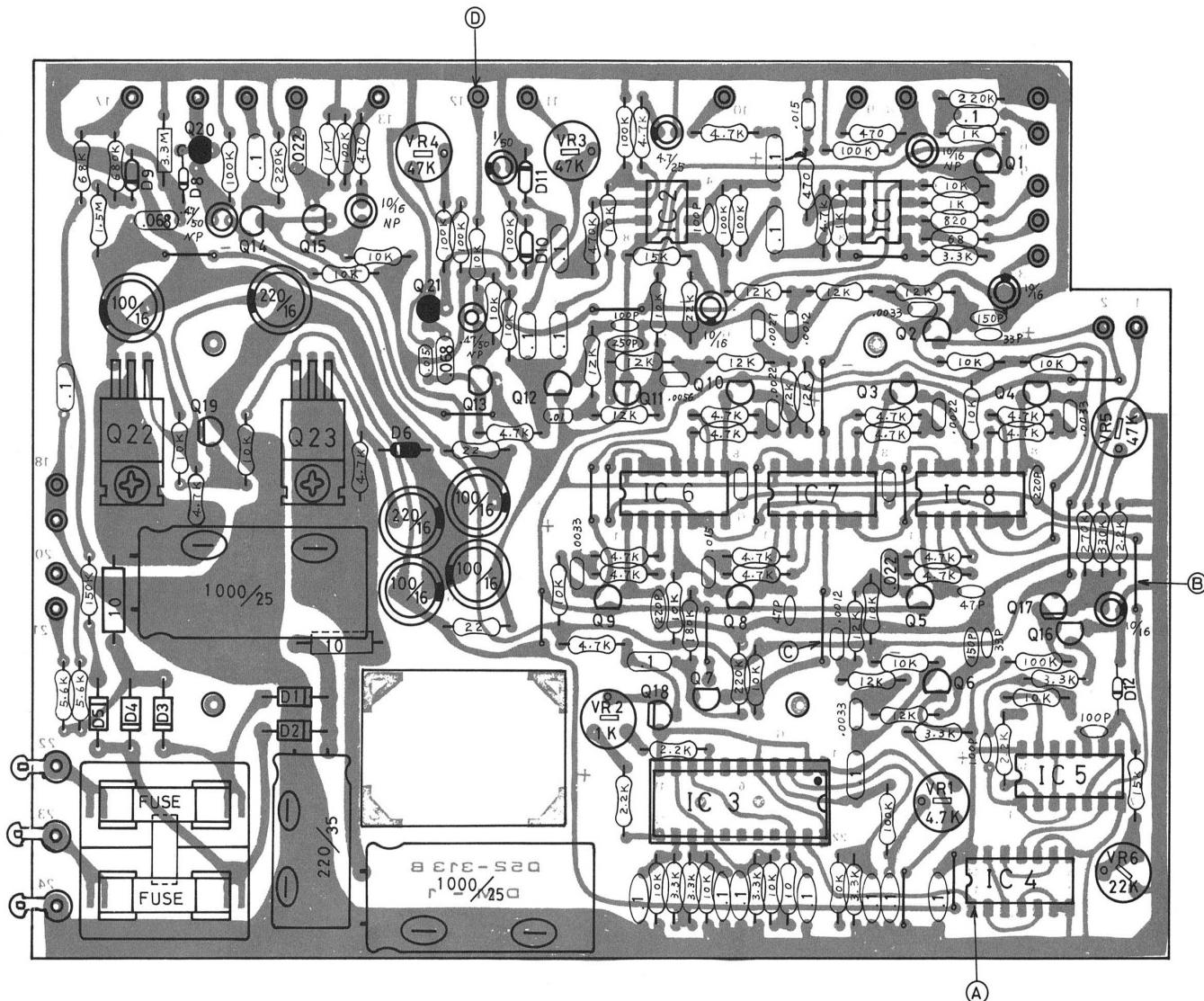
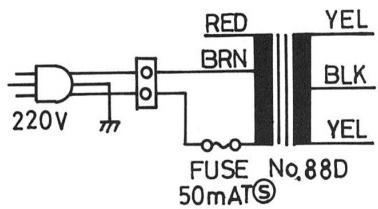
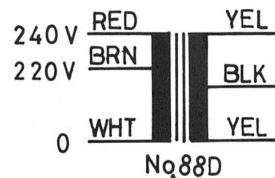
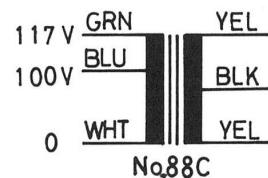
018-014 2S2473 or 1S1588, 1S1555
018-022 1N4003
018-085 RD13EC or 05Z13U
019-014 SLP-4B LED w/lens

POTENTIOMETERS

030-015 V2415N15KC50KB
030-489 CR19R 1K trim.
030-463 SR19R 4.7K trim.
030-467 SR19R 22K trim.
030-469 SR19R 47K trim.
022-088C Power Transformer 100/117V
022-088D Power Transformer 220/240V
008-023 Fuse SGA 0.25A 100/117V
008-059 Fuse CEE 200mA 220/240V
008-053 Fuse CEE 50mA Prim. 220/240V

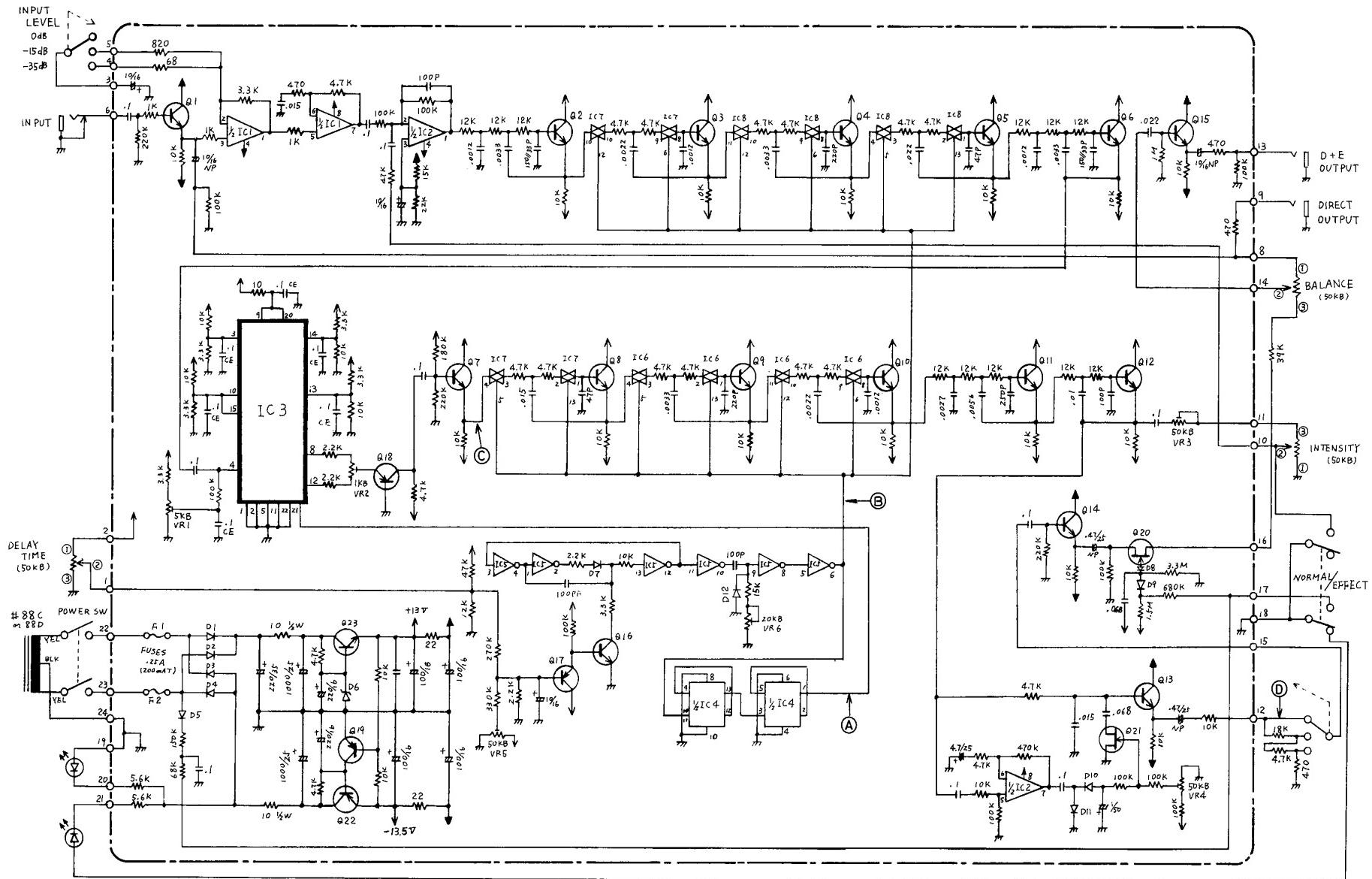
ET-31B(151-031B)

IC1, 2 uPC4558C
 IC3 R5101
 IC4 TC4013P
 IC5 TC4069P
 IC6-8 TC4016P
 Q20 2SK30A-O
 Q1 1-16 2SC900-F
 Q17-19 2SA733-Q
 Q21 2SK30A-Y
 Q22 2SB434-O
 Q23 2SD234-O
 D1-5 1N4003
 D6 05Z13U or
 RD13EC
 D7-12 1S2473 or
 1S1588
 IC socket ICL-244-S7G



SEP. 10 1978

Dm-1

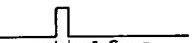
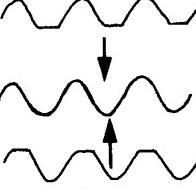
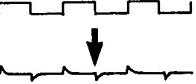
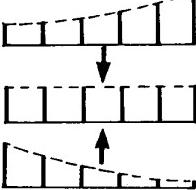


CHECKING & ADJUSTMENT

Before starting any electrical adjustment, check the DC voltages:

+B $+13 \pm 0.5$ V at Q23 (2SD-234) E

-B -13.5 ± 0.5 V at Q22 (2SB-434) E

To check or adjust	connect to	Feed	Set	Adjust	for	Remark
Clock F Low	Scope or F Counter	PCB T.P. (A)	Q○○	VR5 47K	125usec (8kHz)	
Clock F High	Scope (B)		Q○○	(check)	6.25usec (160kHz)	Tolerance $\pm 10\%$
F. C. F Duty Ratio	Scope (C)		Q○○	VR6 22K		Sweep Time 5usec 5X MAG
CCD Clock Pulse Cancel 1st (1st)	Scope (AC range)		Q○○	VR2 1K		Coarse (Fine Adj. later)
CCD Bias	Gen (IN jack)	Sine 500Hz 0dBm	Q○○	VR1 4.7K		Without Distortions
	Scope (D)		Q○○ Q○○	(check)		
CCD Clock Pulse Cancel (2nd)	Scope (AC range)		Q○○	VR2 1K		Minimize amplitude
Cutoff F	VTM (D)		b c a	(check)	Fig.1	
Noise Killer	Amp Sp (IN jack)	Sine -20dBm	Q○○○ Effect On	VR4 47K	Rotating from FCW position, stop where noise suddenly reduces	
Intensity	Amp Mic (D+E jack)	Staccato	Q○○○ Effect On	VR3 47K		Multiple repetitions with constant amplitude

Abbreviation

- Scope Oscilloscope
- F Frequency
- Gen Signal Generator
- VTM Voltmeter
- FCW Fullclockwise

Fig.1

